

## ABSTRACT OF THE DISCLOSURE

Frequency converting circuits each correspond to one satellite and convert frequency bands of two types of polarization signals received from the corresponding satellite into two intermediate frequency bands that do not overlap with each other.

- 5     Signal couplers each correspond to one satellite and perform frequency-multiplexing of the two types of polarization signals from the corresponding satellite having their frequency bands converted, to generate a first combined signal. A signal rearranging circuit selects any two first combined signals from the two first combined signals allowing duplicate selection, and takes out any one polarization signal from each of the
- 10    selected first combined signals, and performs frequency-multiplexing of the taken out two polarization signals to generate a second combined signal.